

Amendments to the Abstract

ABSTRACT

Process and device intended for regeneration of a used absorbent from a desulfurization zone or from the desulfurization of a gas containing sulfur oxides, comprising regeneration simultaneously with filtering of said-the absorbent, in a reducing atmosphere, wherein partial combustion of a regeneration gas is also carried out upstream from regeneration, the products of said-the partial combustion being mixed with the used absorbent prior to the regeneration-filtration stage. The absorbent may be, e.g., solid absorbents based on magnesium oxide. The regeneration gas may be hydrogen sulfide and/or a hydrocarbon. For example, H<sub>2</sub>S can be partially combusted and the products of the partial combustion, including H<sub>2</sub>S, H<sub>2</sub>, SO<sub>2</sub> and sulfur, mixed with the used absorbent prior to the regeneration-filtration stage.